Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)
	)
INCREASING PUBLIC SAFETY	)
INTEROPERABILITY BY PROMOTING	)
COMPETITION FOR PUBLIC SAFETY	)
COMMUNICATIONS TECHNOLOGIES	)

PS Docket No. 10-168

COMMENTS OF GREAT RIVER ENERGY

I. Introduction

a. Identification and Description of Our Company

Great River Energy is a not-for-profit generation and transmission cooperative which provides wholesale electricity to more than 1.7 million people through 28 member distribution cooperatives in Minnesota and Wisconsin. Great River Energy is the second largest utility in the state, based on generating capacity, and the sixth largest generation and transmission (G&T) cooperative in the United States. Great River Energy's member cooperatives range from those in the outer-ring suburbs of the Twin Cities to the Arrowhead region of Minnesota to the farmland of southwestern Minnesota. Great River Energy's largest distribution cooperative serves more than 120,000 meters; the smallest serves just over 2,400.

II. Existing Trunked Mobile Radio System

Great River Energy operates aUHF, narrowband, proprietary trunked mobile radio system throughout our approximate 70,000 square mile service and operations area. This trunked mobile radio system is used not only for Great River Energy's field personnel, but is also used by 15 of our member distribution cooperatives and one non-member distribution cooperative. When we installed this radio system in 1998 there were no viable open standard mobile radio standards and really only three manufacturers that could provide a solution for a multi-company radio system. Due to this system being proprietary technology, we are only able to purchase radios from one manufacturer that are quite expensive.

III. TETRA Technology

TETRA technology was becoming available in Europe at the time we deployed our trunked mobile radio system in 1998 and we have closely watched its evolution over the years. TETRA is deployed in 114 countries throughout the world and has the largest number of manufacturers providing equipment of any mobile radio technology. TETRA is used in many different industries within these countries including public safety, utilities, and transportation, among others. TETRA is a spectrally efficient, feature rich technology and due to competition, costs for TETRA subscriber units are nearly one quarter the price we pay for our current subscriber units.

IV. Importance of Mobile Radio Communications To Utilities

Utilities, like public safety, rely heavily on privately owned and operated mobile radio systems. This is the communications system we use for communication from our dispatch centers to field crews for maintenance and repair of the power grid. This radio system is designed with extremely high reliability, and has a minimum of three days of back up generation at every site so that in the case of a blackout situation, our crews have communications to get the power grid started. Because of the need for durability and reliability, utilities typically purchase radio systems designed for public safety users. The radio system we use is the same radio system deployed by hundreds of public safety agencies throughout the country. For this reason, the options that public safety has access to for their communications is of extreme interest and importance to utilities.

V. Responses to FCC Questions

1. **What are the factors that affect the current state of competition in the provision of public safety communications equipment?**
    a. The mobile radio market is more or less controlled by a small number of manufactures that use their intellectual property rights as a barrier to keep other mobile radio manufacturers out of the market and keep the costs of radios significantly higher in the United States than they are in other parts of the world.
2. **Are there any additional barriers to additional manufacturers supplying network equipment to the public safety community for narrowband communications?**
    a. While TETRA technology is extremely spectrally efficient at 6.25 kHz channel equivalency, exclusive 25 kHz channels are needed for its deployment.
    b. The TETRA standard does not currently meet the FCC's emission mask. There is currently a Waiver Request by the TETRA Association to allow for this variation.
3. **For broadband communications?**
    a. Public safety has access to broadband spectrum. Utilities do not.
4. **How would additional competition in the provision of public safety communications equipment improve narrowband or broadband interoperability?**
    a. By allowing a more open standard that is less expensive that more agencies could deploy, more agencies would be able to easily interoperate when needed.
5. **Conversely, what impact does the current state of competition in the provision of public safety communications equipment and devices have on interoperability?**
    a. Agencies in smaller counties and towns cannot afford the high cost of P25 radio systems. Many of these agencies continue to operate VHF high band systems which cannot interoperate with P25 systems.
6. **Assuming additional competition would benefit public safety interoperability, what actions could the Commission take to improve competition in the provision of public safety communications equipment?**
    a. Approve the TETRA association waiver request to allow TETRA to be used in the United States.
    b. Make provisions in spectrum allocation for contiguous exclusive use 25 kHz channels for PLMR so that TETRA can be deployed.
7. **What are the limitations of Project 25 in promoting narrowband public safety communications interoperability?**
    a. As mentioned above, P25 systems are costly and cannot be deployed by all agencies.
8. **What actions, if any, should the Commission take to rectify these limitations?**
    a. Approve the TETRA waiver to allow TETRA, the open, most widely deployed technology in the world to be able to be used in the United States. Also, make provisions in spectrum allocation for contiguous exclusive use 25 kHz channels for PLMR so that TETRA can be deployed.

9. **Could open standards for public safety equipment increase competition?**
    a. Yes.
10. **What actions could the Commission take to facilitate openness?**
    a. Approve the TETRA waiver to allow TETRA, the open, most widely deployed technology in the world to be able to be used in the United States.
11. **As the Commission considers requirements for the 700 MHz broadband public safety network, are there any requirements on public safety equipment or network operators that would increase competition in the provision of public safety equipment? How can the Commission's work on requirements for the 700 MHz broadband public safety network be leveraged to promote interoperability between narrowband and broadband networks?**
    a. No comment.

Respectfully submitted,

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